

L Area Oil and Chemical Basin

Background

The L Area Oil and Chemical Basin (LAOCB) is centrally located at the Savannah River Site in the southeastern portion of L Area, just outside L Area perimeter fence. The basin measures 118 feet long by 79 feet wide.

The LAOCB is an unlined seepage basin that was designed and constructed for the purpose of disposing of small volumes of radiological contaminated solvents and water. The basin operated from 1961 to 1979. During that time, wastes were transported to the basin via a pipeline, 55-gallon drums, and tanker trucks. The waste liquids consisted of small volumes of oil on top of wastewater and solvents.

Environmental Concerns

Basin sediment/subsoil sampling studies conducted in 1985 indicated the presence of twelve radionuclide contaminants. A Remedial Investigation/Baseline Risk Assessment (RI/BRA) of the basin was prepared. The RI/BRA concluded that the contaminants in the basin posed a risk to human health and the environment and that remediation of the basin was warranted.

Environmental Actions and Plans

In 1997, the U.S. Environmental Protection Agency (EPA) and the South Carolina Department of Health and Environmental Control (SCDHEC) approved the Record of Decision (ROD) for the LAOCB. The ROD selected stabilization/solidification of the basin along with construction of a low-permeability engineered soil cover as the preferred method of remediation.

Remediation of the basin has been completed. Pipelines to the LAOCB were removed, and the pipelines, along with the contaminated soil associated with them, were placed in the basin. Testing was performed to determine an acceptable grout mix for stabilizing the contaminants found in the basin. An acceptable grout mix was selected, and grouting of the basin was performed. A low permeability engineered soil cover was installed. A Post Construction Report/Final Remediation Report documenting the remedial actions taken was submitted to and approved by the EPA and SCDHEC.